



ISACA Data Analytics Presentation

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Introductions



Charl du Plooy
Managing Director
Risk Assurance Services,
Atlantic Region



Courtney Brown
Director
Data Assurance and Analytics Services
Toronto and National Region

Agenda

15 min



Fun Facts & Background

30 min



Getting Practical with Demos

10 min



“How To” Session & Common Pitfalls

5 min



Questions

Fun Facts & Background



Data explosion is turning risk into opportunity

- Data production will be 44 times greater in 2020 than it was in 2009 - *Wikibon – The Big List of Big Data Infographics*
- 30 Billion pieces of content shared on Facebook every month. *McKinsey – Big data: The next frontier for innovation, competition, and productivity*
- In 2008, Google was processing 20,000 terabytes of data (20 petabytes) a day. *TechCrunch – Google Processing 20,000 Terabytes A Day, And Growing*
- Walmart handles more than 1 million customer transactions every hour, which is imported into databases estimated to contain more than 2.5 petabytes of data. *SAS Big Data Meets Big Data Analytics*
- Myth - A successful Continuous Auditing implementation relies heavily on the type of software or technology solution implemented” *Harnessing The Power of Continuous Auditing, Robert L. Maynard*
- “Presently less than 0.5% of all data is ever analysed and used, think of the potential that can be harvested?” *www.technologyreview.com*
- “John Henry and Tom Werner purchased the Boston Red Sox in 2002 and hired baseball analytics expert Bill James in 2003. Since this date the Red Sox have won World Series titles in 2004, 2007 and 2013.” *boston.redsox.mlb.com*

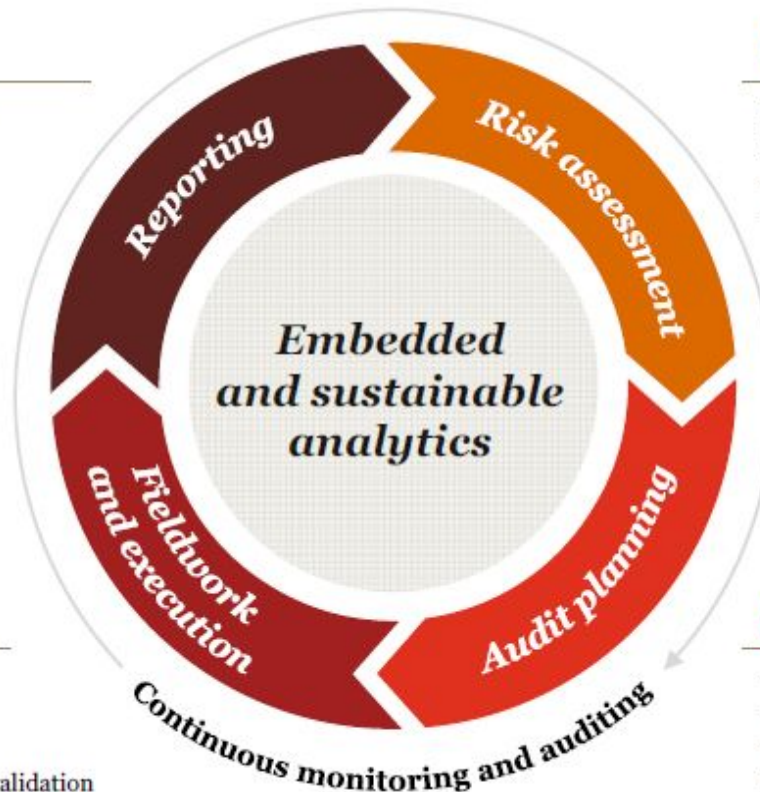
Analytics adds value at each stage of the Risk Assessment Lifecycle

04

- Audit and executive reports
- Issues dashboard
- Compliance metrics
- Analytics validation review

03

- Multi-unit auditing
- Data-driven testing
- 100% coverage
- Process, control, and results validation
- Root cause identification



01

- Enterprise risk management
- Annual internal audit risk assessment
- Risk monitoring
- Business unit or site-level profiling

02

- Project-level risk assessment
- Audit pre-planning
- Audit scoping and planning
- Risk attribute sampling

A close-up photograph of a person's hands. The left hand holds a tablet computer, and the right hand holds a white card. The background is a blurred blue and white pattern, possibly a shirt. A red rectangular box with a white border is overlaid on the top left, containing the title text.

Getting Practical with Demos

Summary of Relevant Demos

Traditional and Mature Risk Analysis



- 1 *Travel and Entertainment (Reputational)*
- 2 *Payroll Analytics (Financial)*
- 3 *Journal Entry Recording (Operational & Financial)*

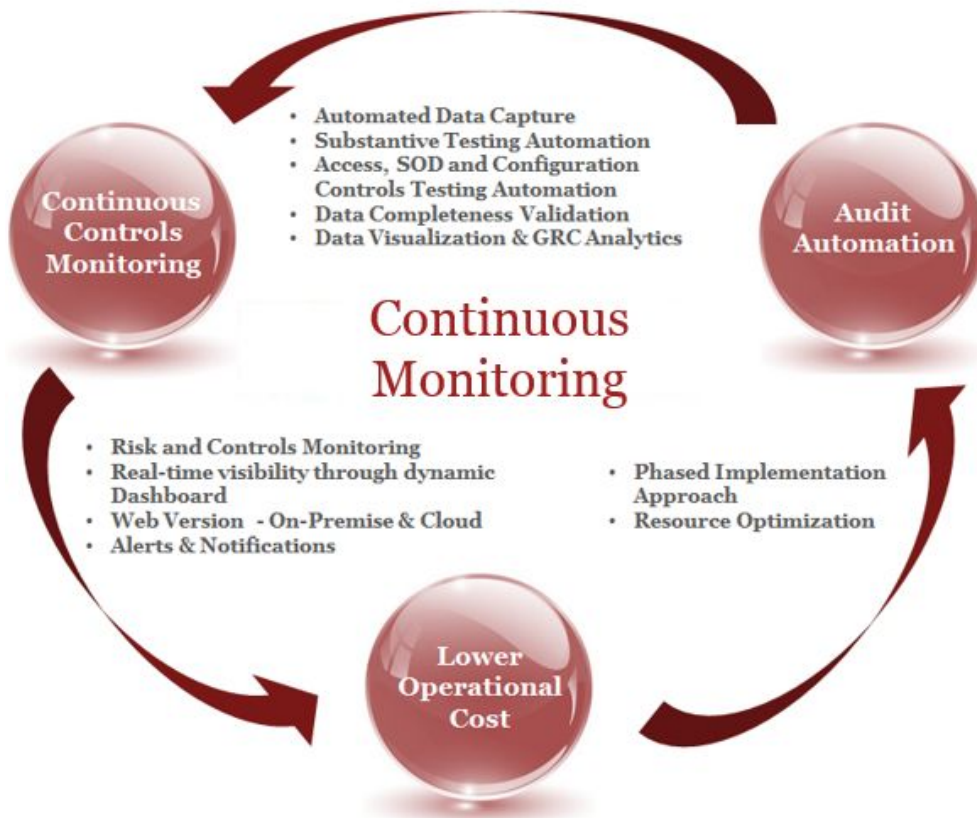
Behavioural & Operational Risk Analysis



- 4 *Process Intelligence (Operational & Financial)*
- 5 *Health, Safety, Environmental Risk (Operational, Financial and Reputational)*
- 6 *People & Culture Analytics (Attrition - Optional)*

Continuous Monitoring

Allows your organization to efficiently embed preventive controls and appropriate monitoring in and around your ERP application



Key Benefits:

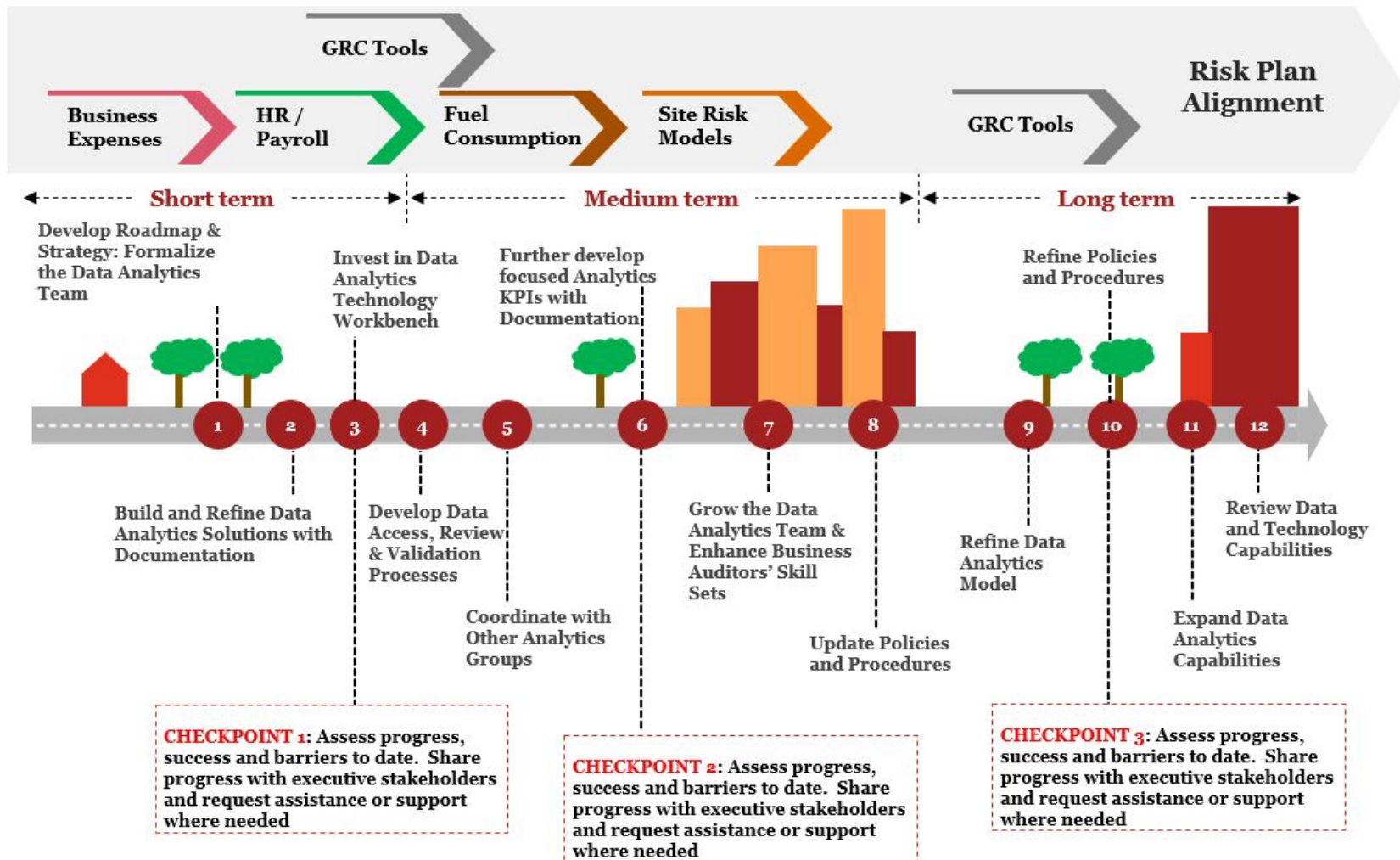
- Help your organization perform continuous controls monitoring and maintain timely visibility over the status of your controls
- Automate the execution of various types of audits, in turn increasing audit quality and efficiency with the goal of reducing the workload of your staff at the same time
- Extract data in real time or on periodic interval from your systems to improve your IT environment and related controls monitoring on a real-time and proactive basis
- Gain a better and holistic real-time view of your IT and business environment from a controls perspective, considering both compliance and operational risk

“How To” Session & Common Pitfalls



Risk Analytics Roadmap and Strategy

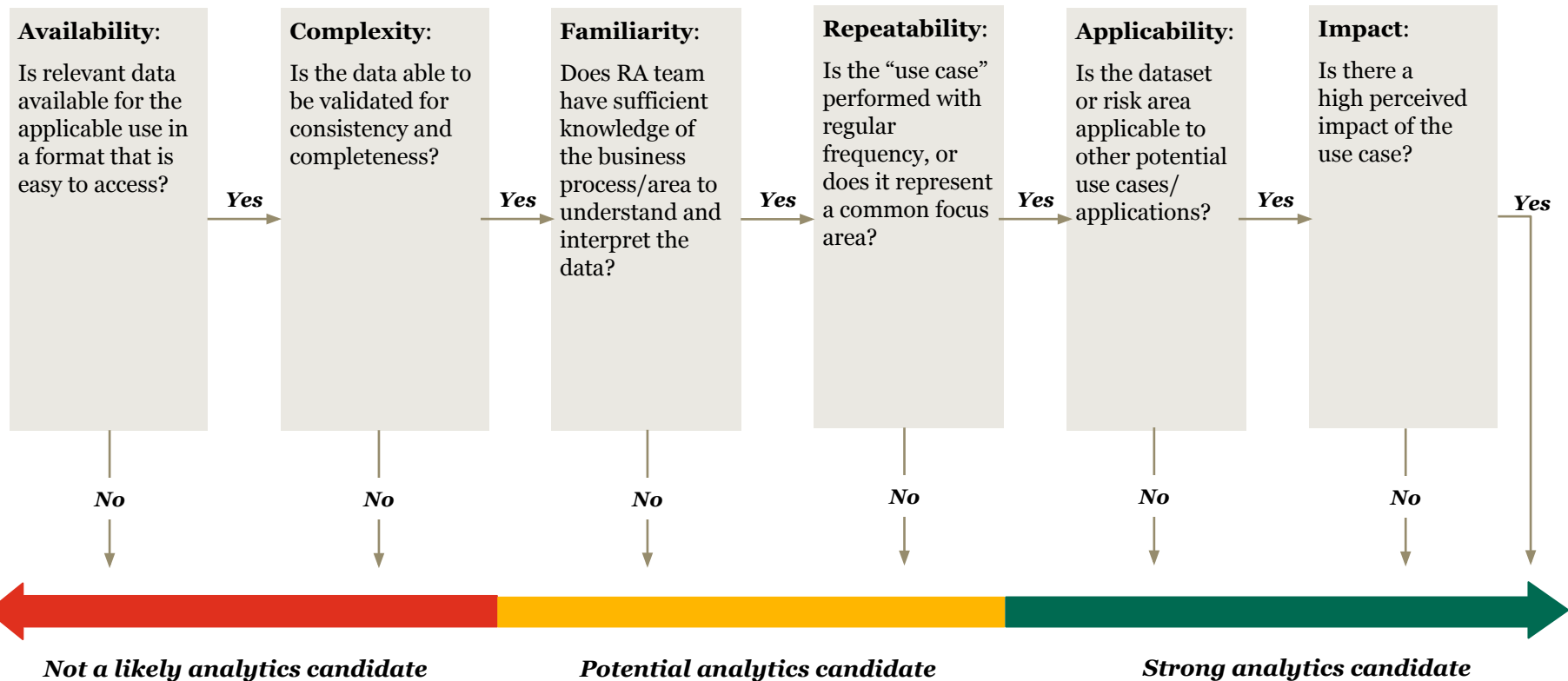
The following illustrates a high-level risk analytics plan and roadmap that highlights key activities to consider over short, medium and long term.



Framework for selecting risk analytics applications



Start



Avoid the Common Pitfalls



1. Have a Strategy - start small, think big and evolve over time
2. Don't go it Alone
3. Data-driven culture is important - realize measurable “quick wins”, build awareness & celebrate successes
4. This is not about automation
5. Seeing Analytics as transformative to business operations - not as a bolt-on
6. Do not create a siloed analytics team - they must be integrated

Questions





Thank you